

WHAT IS CLAIMED IS:

1. A method for automatically controlling the level of a patient's medication administered from a programmable infusion pump, comprising:
  - 5 programming the infusion pump with a set of patient-specific, predetermined ranges of medication;
  - initiating an evaluation of the patient's current medication;
  - obtaining information pertaining to the patient's
  - 10 pain level;
  - obtaining information pertaining to the patient's side effects;
  - obtaining information pertaining to the patient's impairment of functionalities;
  - 15 obtaining information pertaining to the patient's current medication;
  - evaluating the patient's current medication, pain level, side effects and impaired functionalities with the set of patient-specific, predetermined ranges of
  - 20 medication; and
  - controlling administration of the patient's medication based on the evaluation.
2. The method of claim 1, wherein the step of
- 25 obtaining information pertaining to the patient's current medication comprises storing information pertaining to the amount of medication administered to the patient over a predetermined period of time.
3. The method of claim 1, wherein the controlling
- 30 administration of the patient's medication includes modification of a basal delivery rate, a bolus dose and a number of bolus allowed within a certain time frame.

4. The method of claim 1, wherein the step of obtaining information pertaining to the patient's pain level further comprises storing the number of bolus requests made by the patient which exceed the maximum  
5 number of permitted boluses.

5. The method of claim 2, wherein the obtaining information pertaining to the patient's pain level, side effects and impairment of functionalities steps further comprise the steps of querying the patient regarding the  
10 patient's pain level, side effects and impairment of functionalities.

6. The method of claim 2, wherein the step of obtaining information pertaining to the patient's side effects further comprises the step of providing an  
15 independent evaluation of the patient's side effects.

7. The method of claim 2, wherein the step of obtaining information pertaining to the patient's impairment of functionalities further comprises the step of providing an independent evaluation of the patient's  
20 impairment of functionalities.

8. A routine for operating an infusion pump to automatically control the level of a patient's medication, the infusion pump comprising a controller for executing the routine and a memory for storing the  
25 routine, responsive to a request for an evaluation of the patient's current medication; comprising:

a set of patient-specific, predetermined ranges of medication stored in the memory;

a procedure for obtaining information pertaining to  
30 the patient's pain level;

a procedure for obtaining information pertaining to

the patient's side effects;

a procedure for obtaining information pertaining to the patient's impairment of functionalities;

5 a procedure for obtaining information pertaining to the patient's current medication;

a procedure for evaluating the patient's current medication, pain level, side effects and impaired functionalities with the set of patient-specific, predetermined ranges of medication; and

10 a procedure for modifying the patient's medication based on the evaluation.

9. An infusion pump for administering a liquid medicant to a patient, comprising:

15 a liquid injection device adapted to be connected to the patient;

a conduit connected to the liquid injection device;

a pumping mechanism for pumping the liquid medicant through the conduit and into the patient via the liquid injection device;

20 a controller for controlling the pumping mechanism, wherein the controller controls the amount of liquid medicant administered to the patient;

25 a memory storing a set of patient-specific, predetermined rates and amounts of liquid medicant to be administered to the patient;

a data acquiring routine for obtaining information pertaining to the patient's pain level, side effects and impairment of functionalities; and

30 a control routine for processing the data pertaining to the patient's pain level, the patient's side effects, the patient's impairment of functionalities, and a current rate and amount of liquid medicant being administered to the patient and for automatically changing the rate and amount of the liquid medicant to be

administered to the patient in accordance with the set of patient-specific, predetermined ranges of medication.

10. The infusion pump of claim 9 further wherein the memory stores data regarding the liquid medicant administered to the patient over a predetermined period of time and wherein the modification routine processes the data regarding liquid medicant administered to the patient.

11. The infusion pump of claim 10 wherein the current rate and amount of liquid medicant being administered to the patient comprises a basal delivery rate, a bolus dose and a number of bolus allowed within a certain time frame.

12. The infusion pump of claim 11 wherein data pertaining to the patient's pain level comprises the number of bolus requests made by the patient which exceed the maximum number of boluses .

13. The infusion pump of claim 11 wherein data pertaining to the patient's pain level, side effects and impairment of functionalities comprises data stored in response to querying the patient regarding the patient's pain level, side effects and impairment of functionalities.

14. The infusion pump of claim 11 wherein data pertaining to the patient's side effects comprises data stored from an independent evaluation of the patient's side effects.

15. The infusion pump of claim 11 wherein data pertaining to the patient's impairment of functionalities

comprises data stored from an independent evaluation of the patient's impairment of functionalities.

16. A method for automatically controlling the level of a patient's medication administered from a programmable infusion pump, comprising:  
5 programming the infusion pump with a set of patient specific, predetermined ranges of medication;  
evaluating the patient's current medication;  
evaluating the patient's physiological conditions;  
10 and  
controlling administration of the patient's medication within the predetermined range of medication based on the evaluation.

17. The method of claim 16, wherein the evaluating the patient's physiological conditions step includes  
15 evaluating the patient's pain level, the patient's side effects and the patient's impairment of functionalities.

18. The method of claim 16, further comprising querying the patient about his physiological conditions;  
20 and storing the patient's responses.